Corn husking made rapid progress in the Ohio Valley during the last decade and considerable shredding was accomplished. In Iowa husking varied from scarcely begun to half done; the feeding value and general quality of the crop were reported the best for several years, but it was mostly too wet for cribbing in the extreme eastern and southern portions. Husking advanced in the Great Plains, with cribbing beginning in Kansas and being general in Missouri.

Cotton.—During the first decade in the Atlantic States the warmth and sunshine were favorable and cotton opened rapidly, with picking and ginning advancing well. In the central States of the belt conditions favored rapid opening and also harvesting, except for considerable rain in places, principally in Arkansas. In Oklahoma warmth and persistent dryness made a continuation of unfavorable conditions in the west, but the bulk was open and being picked rapidly. In Texas progress was poor in the northwest, with premature opening, but the crop was mostly made elsewhere, with top-crop conditions poor; the weather favored picking.

During the second decade frequent rains caused considerable delay to cotton picking east of the Mississippi River, except in Atlantic coast areas where generally good advance was reported. There was also some interruption in Louisiana, but very good advance was reported from Arkansas. In Oklahoma cotton was mostly open and picking advanced rapidly, while in Texas the crop was mostly out in southern and central portions and fair to good progress was reported from the Northwest.

During the last decade fair weather favored picking and ginning over the eastern belt, but toward the close of the month rains interrupted this work in the northwestern, but gathering was well along in all sections. Some cotton in northwestern Texas was blown out by high winds and local harm to staple was reported in the central-northern portions of the belt.

Miscellaneous crops.—Pastures were fair to good east of the Appalachian Mountains, but to the westward there was a rather general need of moisture most of the month. Rains were of some benefit in parts of the upper Mississippi Valley, while showers were helpful in the central Rocky Mountain region and the Southwest. It continued generally unfavorably dry in the Great Basin and rather generally in Pacific coast sections. Livestock held up well, however, although large numbers were on feed in the Great Basin.

Potato digging progressed during the month and was practically completed at the close. Truck crops made mostly satisfactory advance, although killing frosts damaged some late truck in Middle Atlantic States during the latter part. Sugar-cane conditions continued excellent in Louisiana and sugar-beet digging progressed well. Cool weather at the close improved citrus in Florida and hastened coloring; citrus did well in California.

WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

NORTH ATLANTIC OCEAN

By F. A. YOUNG

The weather conditions were exceptionally severe over the middle and eastern sections of the North Atlantic. West of the fiftieth meridian the number of days with gales was somewhat below the normal and along the American coast moderate conditions prevailed with the exception of a few disturbances that will be referred to later.

Charts VIII to XII show the conditions from the 11th to 15th, inclusive, during the flight of the German airship *Graf Zeppelin*, which left Germany on the 11th for the United States.

The number of days with fog, judging from reports received, was considerably below the normal over the Grand Banks, the greater part of the steamer lanes and off the European coast, while not far from normal along the American coast between Hatteras and Newfoundland.

On the 1st a disturbance was central near 41° N., 51° W., that moved rapidly eastward, reaching its greatest extent and intensity on the 3d when near 52° N., 30° W. On that date the storm area extended over the northern steamer lanes from the fifteenth to the fortieth meridians and vessels in the southwesterly quadrants reported northwesterly gales of force 11 and 12 at the time of observation. By the 4th this disturbance had diminished somewhat in force, although whole westerly gales still prevailed over a considerable area; by the 5th it was off the west coast of Ireland, with moderate conditions near the center, although southerly gales were reported from the vicinity of the Azores. On the 5th there was a second LOW central near 45° N., 45° W., that also became dangerous as it traveled eastward, and from the 6th until the 11th a succession of severe gales prevailed over portions of the middle and eastern sections of the steamer lanes.

TABLE 1.—*Averages, departures, and extremes of atmospheric pressure at sea level, 8 a. m. (seventy-fifth meridian), North Atlantic Ocean, October, 1928*

Stations	Average pressure	Departure [1]	Highest	Date	Lowest	Date
	Inches	*Inch*	*Inches*		*Inches*	
Julianehaab, Greenland	29.61	(2)	30.08	29th	29.10	16th.
Belle Isle, Newfoundland	29.77	−0.10	30.20	28th	29.16	15th.
Halifax, Nova Scotia	30.07	+0.07	30.58	31st	29.48	25th.
Nantucket	30.12	+0.10	30.54	31st	29.52	24th.
Hatteras	30.16	+0.13	30.44	30th	29.74	24th.
Key West	30.00	+0.02	30.14	26th [3]	29.92	1st. [3]
New Orleans	30.08	+0.07	30.30	26th	29.90	1st. [3]
Cape Gracias, Nicaragua	29.86	−0.04	29.90	20th [3]	29.78	24th.
Turks Island	30.02	+0.07	30.08	26th [3]	29.96	4th. [3]
Bermuda	[4] 30.18	+0.16	30.36	28th	29.88	1st.
Horta, Azores	30.28	+0.16	30.56	25th	29.92	3d.
Lerwick, Shetland Islands	29.63	−0.16	30.20	3d [3]	28.46	20th.
Valencia, Ireland	29.74	−0.17	30.29	1st	29.11	26th.
London	29.85	−0.06	30.30	3d	29.28	27th.

[1] From normals shown on Hydrographic Office Pilot Chart, based on observations at Greenwich mean noon or 7 a. m. seventy-fifth meridian.
[2] No normal available.
[3] And on other dates.
[4] Average of 27 observations.

On the 10th a disturbance of tropical origin was somewhere in the vicinity of 22° N., 37° W., as indicated by the storm report from the Dutch S. S. *Prins Frederik Hendrik*. Unfortunately, this is an unfrequented part of the ocean and so few reports have been received that it has been difficult to trace its track accurately until the 14th, the position on that date being shown on Chart XI. It was on the 14th that the American tanker *David C. Reid* foundered, her approximate position being given in an SOS as 37° N., 38° W., apparently not far from the center of the disturbance just referred to.

From the 17th to 21st the middle and eastern sections of the steamer lanes were again swept by a succession of gales that reached their greatest intensity on the 19th. On the 21st a LOW was central off the south coast of Newfoundland that moved eastward, increasing in inten-

sity, and on the 23d and 24th gales of hurricane force were once more encountered over the steamer lanes east of the forty-fifth meridian.

On the 24th Eastport, Me., was near the center of a LOW that proved to be considerably less severe than its predecessors, although on the evening of this day moderate gales were reported from the vicinity of Hatteras.

On the 25th stormy conditions prevailed over the greater part of the steamer lanes and on the 26th and 27th northerly and northwesterly gales prevailed between the twentieth meridian and the European coast.

From the 24th to the 26th moderate to strong gales were reported from the region between the Bermudas and Nantucket.

At different periods between the 27th and the end of the month heavy weather occurred over the middle and eastern sections of the steamer lanes, although on the 28th moderate conditions were the rule over the ocean as a whole.

On the 30th there was a disturbance of limited extent and duration in the Caribbean Sea, as shown by storm report from the British S. S. *Ulua*.

OCEAN GALES AND STORMS, OCTOBER, 1928

Vessel	Voyage		Position at time of lowest barometer		Gale began	Time of lowest barometer	Gale ended	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Highest force of wind and direction	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN			° ′	° ′				*Inches*					
Waaldijk, Du. S. S.	Norolk	English Channel.	41 37 N.	51 00 W.	Sept. 30	2 p., Oct. 1	Oct. 2	29.42	SE.	SW., 8	NNW.	SW., 9	SW.-WNW.
Thuringia, Ger. S. S.	Cobh	Halifax	48 10 N.	35 00 W.	Oct. 2	10 a., 2	4	28.82	SSE.	SSW., 11	W.	WNW., 12	
Chief Skidegate, Br. S. S.	Canal Zone	Rotterdam	43 20 N.	42 30 W.	2	4 p., 2	4	29.49	S.	W., 7	W.	WNW., 12	SW.-W.-NW.
American Farmer, Am. S. S.	London	New York	49 33 N.	33 56 W.	2	4 p., 2	4	28.35	NW.	W., 6	W.	NW., 12	SE.-W.-NW.
Dresden, Ger. S. S.	New York	Cobh	48 39 N.	30 25 W.	1	10 a., 3	4	28.81	SE.	WSW., 10	SW.	NW., 12	
Western Ally, Am. S. S.	Rotterdam	New York	51 02 N.	27 35 W.	2	5 p., 3	5	28.46	ESE.	S., 10	W.	SSE., 11	SSE.-S.
München, Ger. S. S.	Cobh	do	44 21 N.	55 36 W.	4	8 p., 4	5	29.64	W.	NW., 10	N.	NW., 10	W.-NNW.
Rochambeau, Fr. S. S.	Havre	do	45 00 N.	45 20 W.	5	3 p., 5	6	29.29	SE.	W.	WNW.	NW., 12	
Sahale, Am. S. S.	Bremen	Galveston	39 49 N.	31 12 W.	5	7 a., 5	5	29.82	S.	SSW.		WSW., 10	S.-SW.
Lorain, Am. S. S.	do	Portland, Me.	49 30 N.	41 25 W.	6	8 a., 6	7	29.03	NNW.	NNW., 11	WNW.	—, 11	Steady.
Dannedaike, Am. S. S.	Hamburg	New York	46 20 N.	33 15 W.	6	4 a., 6	7	29.11	SW.	SW., 11	W.	SW., 11	SSW.-W.
Waaldijk, Du. S. S.	Norfolk	English Channel.	49 33 N.	14 46 W.	6	2 p., 8	9	29.28	SSW.	SSW., 8	W.	W., 10	SW.-W.
Republic, Am. S. S.	New York	Cobh	50 05 N.	33 25 W.	7	8 p., 9	11	29.04	SSW.	SW., 9	W.	W., 10	Steady.
Prins Frederik Hendrik, Du. S. S.	Amsterdam	Surinam	20 41 N.	37 34 W.	10	8 p., 10	11	29.96	E.	E., 10	SSE.	E., 10	E.-SE.-SSE.
Berlin, Ger. S. S.	Bremerhaven	New York	49 08 N.	27 17 W.	10	4 p., 10	11	29.10	WSW.	WSW.	W.	W., 11	WSW.-W.
Myriam, Fr. S. S.	St. Nazaire	Curacao	29 50 N.	47 22 W.	13	4 p., 13	14	29.64	NE.	N., 8	NW.	NNE., 8	
Sinsinawa, Am. S. S.	Casablanca	New York	37 02 N.	64 00 W.	13	10 p., 13	14	29.91	W.	W., 8	NW.	W., 9	W.-NW.
Wray Castle, Br. S. S.	Oran	do	34 41 N.	41 45 W.	14	11 a., 14	15	29.01	SE.	SSE.	SW.	SSE., 12	SE.-S.-WSW.
Exporter, Am. S. S.	Gibraltar	do	35 25 N.	41 05 W.	14	10 a., 14	14	28.95	W.	SW., 12	W.	SW., 12	SW.-W.-SW.
Delilian, Br. S. S.	Liverpool	Kingston	37 55 N.	39 08 W.	14	2 p., 14	14	29.07	SSE.	SSE., 12	WSW.	SSE., 12	SSE.-WSW.
Duivendrecht, Du. M. S.	Texas City	Thameshaven	48 51 N.	26 01 W.	15	8 a., 15	15	29.28	S.	SSW., 9	SW.	S., 10	SSW.-SW.
Westward Ho, Am. S. S.	Galveston	Liverpool	44 45 N.	42 55 W.	17	2 a., 17	21	29.69	W.	N., 7	WNW.	NW., 10	
Wellfield, Br. M. S.	Tyne	Galveston	58 19 N.	8 02 W.	18	Noon, 18	19	28.48	SSW.	SSW., 9	NW.	NW., 10	Steady.
West Eldara, Am. S. S.	New York	Antwerp	49 30 N.	18 40 W.	19	9 a., 19	19	28.65	S.	WSW.	WNW.	W., 11	
West Carnifax, Am. S. S.	Gibraltar	Boston	38 18 N.	63 30 W.	20	1 p., 20	21	29.89	SSW.	SSW., 9	WNW.	SSW., 9	SSW.-SW.
Ruth, Nor. S. S.	Archangel	West Hartlepool.	59 19 N.	5 18 E.	19	8 a., 20	21	29.11	SE.	SE.	SSW.	SE., 10	SE.-S.
Mississippi, Br. M. S.	Halifax	London	45 44 N.	56 50 W.	20	3 a., 21	23	29.45	SW.	SW., 9	NW.	SW., 9	SW.-WNW.
Bussum, Du. S. S.	Leith	Montreal	56 46 N.	40 28 W.	22	1 p., 22	23	28.69	NE.	N., 9	N.	N., 10	E.-NE.-N.
Bellepline, Am. S. S.	Rotterdam	New York	48 25 N.	39 20 W.	21	11 p., 22	23	29.54	WSW.	W., 12	NW.	—, 12	WSW.-WNW.
Stuttgart, Ger. S. S.	New York	Southampton	47 48 N.	31 19 W.	23	10 a., 23	23	29.91	NW.	NW., 9	NW.	NW., 10	Steady.
Karlsruhe, Ger. S. S.	Bremerhaven	New York	48 55 N.	25 04 W.	20	4 a., 23	25	29.42	WSW.	WSW., 10	SW.	WSW., 11	
Columbus, Ger. S. S.	Plymouth	do	49 46 N.	49 13 W.	23	4 p., 23	25	28.98	SW.	W., 11	SW.	W., 11	
El Almirante, Am. S. S.	New Orleans	do	30 50 N.	79 15 W.	24	9 a., 24	24	29.76	NW.	NW., 8	N.	NW., 8	NW.-N.
Balsam, Am. S. S.	Cardiff	Baltimore	38 30 N.	64 15 W.	24	3 p., 24	26	29.43	SSE.	SSW.	NNW.	SSW., 9	SSE.-SW.
Darian, Br. S. S.	Liverpool	Charleston	51 39 N.	7 24 W.	24	Noon, 24	27	29.08	SW.	SW.	NW.	SW., 10	SW.-WNW.
Emile, L. D., Fr. S. S.	Rotterdam	Montreal	50 21 N.	1 19 W.	26	4 a., 27	27	28.90	SW.	SE., 9	NE.	—, 9	SSW.-SE.-NE.
Nubian, Br. S. S.	Montreal	Avonmouth	53 40 N.	26 54 W.	29	7 a., 29	31	29.76	SW.	W., 10	N.	W., 10	
Ulua, Br. S. S.	Canal Zone	New York	20 42 N.	84 21 W.	30	5 p., 30	30	29.85	ENE.	ENE., 7	ENE.	E., 9	
Tulsa, Am. S. S.	Glasgow	Charleston	48 10 N.	13 00 W.	30	2 a., 30	30	29.78	NW.	NW., 8	NW.	NW., 12	S.-W.
Beemsterdijk, Du. S. S.	Rotterdam	Quebec	53 44 N.	36 55 W.	31	10 a., 31	Nov. 1	29.75	S.	WSW., 6	SW.	NNW., 10	S.-WSW.
NORTH PACIFIC OCEAN													
Egypt Maru, Jap. S. S.	Miike	Vancouver	49 47 N.	131 27 W.	5	5 p., 5	6	29.19		S., 9		S., 9	SSE.-S.
Illinois, Am. S. S.	Hong Kong	San Francisco	47 03 N.	175 42 W.	5	5 p., 5	7	29.50	SW.	W., 8	NW.	NW., 9	SW.-W.
Golden Sun, Am. S. S.	do	do	38 40 N.	149 30 E.	6	5 p., 6	6	29.74	ESE.	S., 8	NE.	NNE., 11	SE.-S.
Santa Veronica, Am. S. S.	Baltimore	Hilo	15 25 N.	110 45 W.	7	5 p., 7	8	29.76	S.	S., 10	SSW.	SSW., 10	SW.-S.
Astral, Am. S. S.	San Pedro	Hong Kong	35 50 N.	169 51 W.	8	7 p., 8	9	29.39	SW.	W., 10	W.	W., 11	WSW.-W.
Chokoh Maru, Jap. S. S.	Miike	Vancouver	48 37 N.	171 28 W.	9	Mdt., 9	9	29.04	NE.	N., 8	N.	NE., 9	
Illinois, Am. S. S.	Hong Kong	San Francisco	45 43 N.	157 50 W.	9	10 a., 9	9	29.52	E.	SE., 10	S.	SE., 10	E.-SE.
Columbia Maru, Jap. M. S.	Tacoma	Yokohama	41 15 N.	147 51 E.	8	6 a., 9	9	29.43	ESE.	S., 10	SE.	S., 10	SE.-S.-SW.
Haisho Maru, Jap. S. S.	Muroran	Vancouver	49 44 N.	162 00 W.	8	Mdt., 8	10	29.39	E.	E., 10	S.	E., 10	E.-S.
Erviken, Nor. S. S.	Yokohama	Juan de Fuca	48 20 N.	172 00 W.	8	10 p., 10	10		E.	E., 8	E.	NE., 12	NE.-SE.
Korea Maru, Jap. S. S.	San Francisco	Honolulu	37 00 N.	124 10 W.	10	4 p., 10	11	29.77	WNW.	NNW., 7	N.	NNW., 9	NNW.-N.
Lowther Castle, Br. S. S.	Panama	do	16 34 N.	113 29 W.	15	2 a., 16	16	29.48	SW.	ENE., 7	NW.	SSW., 8	ESE.-ENE.
Golden Sun, Am. S. S.	Hong Kong	San Francisco	47 20 N.	165 15 W.	15	4 p., 15	17	29.19	S.	SSW., 9	WNW.	W., 10	S.-SW.
Kohnan Maru, Jap. S. S.	Miike	Coos Bay	49 55 N.	162 28 W.	15	3 a., 16	17	28.72	N.	W., 11	WSW.	—, 12	
Arabia Maru, Jap. S. S.	Victoria	Yokohama	52 07 N.	165 57 W.	15	6 a., 16	17	28.48	SE.	N., 9	WNW.	NNW., 11	SE.-N.
Iwatesan Maru, Jap. S. S.	Yokohama	Seattle	50 35 N.	156 00 W.	15	1 p., 16	17	28.94	SSE.	SW., —	SW.	S., 9	
Astral, Am. S. S.	San Pedro	Hong Kong	33 37 N.	149 25 E.	17	1 a., 19	19	29.66	S.	S., 9	SW.	SSW., 10	S.-SSW.
Mayebashi Maru, Jap. S. S.	Yokohama	San Francisco	47 05 N.	179 55 E.	18	Noon, 20	21	29.68	SSW.	SW., 8	W.	W., 9	SW.-WNW.
Olympia Maru, Jap. M. S.	do	Seattle	43 20 N.	156 58 E.	19	4 p., 19	20	29.13	ENE.	SSW., 5	WNW.	NNW., 9	ENE.-SSW.
Kinkasan Maru, Jap. S. S.	Miike	Long View	49 18 N.	170 14 W.	19	6 p., 19	20	28.74	SSW.	W., 9	W.	SSW., 10	SSW.-W.-NW.
Kohnan Maru, Jap. S. S.	do	Coos Bay	48 11 N.	142 04 W.	20	5 p., 20	21	29.56	S.	S., 11	SSW.	S., 11	S.-SSW.
Olympia Maru, Jap. M. S.	Yokohama	Seattle	50 00 N.	174 37 W.	23	Noon, 23	25	28.84	SSW.	WSW., 8	WSW.	W., 9	
Yuri Maru, Jap. S. S.	Muroran	Vancouver	46 42 N.	167 58 E.	23	11 a., 23	25	29.08	S.	S., 8	WNW.	WNW., 10	S.-SSW.
Tokiwa Maru, Jap. S. S.	Yokohama	Victoria	48 12 N.	171 25 W.	27	8 a., 28	28	28.86	SE.	SSE., 8	SSW.	S., 10	SE.-SSE.-S.
Shelton, Am. S. S.	Otaru	San Francisco	49 00 N.	178 45 W.	28	2 a., 29	29	28.75	NE.	NW., 8	WNW.	—, 10	NW.-WNW.
Yuri Maru, Jap. S. S.	Muroran	Vancouver	49 44 N.	147 00 W.	28	6 p., 31	31	28.09	SE.	E., 1	SSE.	E., 9	ENE.-E.-S.
Tacoma, Br. S. S.	Hankow	San Francisco	40 00 N.	154 45 W.	31	9 p., 31	Nov. 2	28 27	SSW.	W., 11	SSW.	SSW., 11	W.-NW.-SW.
SOUTH PACIFIC OCEAN													
Weirbank, Br. S. S.	Makatea Is.	Fremantle	37 45 S.	137 30 E.	3	9 p., 7	8	29.05	SW.	W., 9	W.	SW. 10	Steady.